Abandoned Uranium Mine Site Assessment for the Baby Site (NM0112)

FINAL REPORT

Prepared For:

New Mexico Energy, Minerals and
Natural Resources Department
Wendell Chino Building
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Prepared By:

INTERA

April 14, 2010

NM0112

9746755

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

INTERA Incorporated (INTERA) has prepared this Abandoned Uranium Mine (AUM) Site Assessment Report for the Mining and Minerals Division (MMD) of the New Mexico Energy, Minerals and Natural Resources Department (EMNRD) in compliance with the Professional Service Agreement dated November 2, 2009. INTERA visited the Baby Mine Site (AUM Site), MMD ID: NM0112, on March 5, 2010.

1.1 PREVIOUSLY KNOWN INFORMATION ABOUT THE SITE

The AUM Site was registered as the Baby claim in 1955 and is located in the Cooney area of the Mogollon Mining District. This AUM Site produced a total of 141 pounds of U_3O_8 ore at an average production grade of 0.10 percent according to McLemore (1983). This AUM Site was included in the Anderson Report, which describes workings that may be up to 140 feet (ft) deep. These workings include an upper and lower adit. The Anderson Report reports scintillometer readings being reported by Virginia McLemore in the lower adit in the 250-300 cps range. The Anderson Report also notes that the adits were driven into a fracture zone located in the andesite and that euhedral pyrite is dispersed throughout the andesite (Anderson, 1980).

1.2 SITE LOCATION AND DIRECTIONS

According to the Catron County Tax Assessor Office (February 19, 2010), the AUM Site is located on Forest Service land. According to the 2006 and 2008 BLM GIS land ownership shapefile the AUM Site is located on Forest Service and private land in the S 1/2 Section 20, Township 10 South, Range 19 West, on the Mineral Creek Trail (Trail Head 201). This AUM Site is located in Catron County and is approximately 6.5 miles east of the town of Alma (Figure 1). Two areas were identified as part of this AUM Site, the Western Area and the Eastern Area (please see Figures 2 and 3).

To reach the AUM Site from Albuquerque, drive approximately 75 miles south on Interstate 25. Take Exit 150 to merge onto California Street/US-60 W towards Magdalena. After 2 miles, turn right to continue on US-60 W. Continue on US-60 W for approximately 62 miles. Turn left on to NM-12 for 67 miles after which you must turn right to remain in NM-12. Continue on NM-12 for another 12 miles. Turn left onto US-180 E and continue for approximately 25 miles to the town of Alma.

Once in the town of Alma, turn left onto Mineral Creek Road (Access-1 and Acccess-2). Follow Mineral Creek Road for approximately 6 miles until you reach the Mineral Creek trailhead parking lot (trailhead #201). Once you have reached the parking lot, set out on foot following the trail in Cooney Canyon along Mineral Creek for approximately 0.3 mile. The Western Area AUM Site is located on the rock face of the southern wall of the canyon. The Eastern Area AUM Site can be reached by hiking an additional 0.7 mile upstream. The Eastern Area AUM site is located on the southern side of the canyon across Mineral Creek.

1.3 SITE GEOLOGY

The AUM Site is located in the Mollogon Mountains and on the northwestern edge of the Bursum caldera located in southwestern Catron County. The AUM Site is characterized as Tertiary Last Chance andesite intruding Whitewater Creek rhyolite. Uranium mineralization is associated with hydrothermal-vein deposits of purple fluorite in shear zones in the andesite (McLemore, 1983, Anderson, 1980). Additionally, it is reported that drusy quartz, calcite, and colorless to light green or dark purple fluorite appear in the hydrothermally altered portions of the andesite (Anderson, 1980).

1.4 SITE HYDROGEOLOGY

The AUM Site is located within a narrow canyon (Cooney Canyon) with steep cliff walls. Mineral Creek flows through this canyon and out into the San Francisco River in the Town of Alma. Small tributaries flow into Mineral Creek upstream from the AUM Site.

The AUM Site is located in the San Francisco Basin, which is present in the southwestern portion of Catron County and extends up to a small portion of Grant County (DBSA, 2005). Groundwater in the basin occurs in the alluvial deposits along the San Francisco River (DBSA, 2005). The San Francisco River supplies water to the alluvial aquifer beneath it (DBSA, 2005). A large volume of groundwater exists in the San Francisco Basin, although it is widely distributed throughout the basin (DBSA, 2005).

1.5 REGIONAL TOPOGRAPHY AND TERRAIN

The AUM Site can be found on the Mogollon Quadrangle 7.5 minute United States Geological Survey topographic map at an elevation of approximately 5600 feet above mean sea level (Figure 2). The AUM Site is located in Cooney Canyon in the Gila National Forest. The broader region around the AUM Site consists of mountain ranges separated by narrow canyons. An aerial photograph of the terrain surrounding the AUM Site is shown in Figure 3.

2.0 MINE FEATURES

The mine features described below are based on the features provided to INTERA by MMD in the GIS Data Dictionary (MMD, 2009). INTERA marked the locations of the AUM Site features using a Trimble Global Positioning System (GPS) and entered details about the features into the GPS using the MMD data dictionary. The AUM shapefile provided to INTERA by MMD, referred to herein as the Eastern Area AUM Site, did not correlate with the AUM identified in the Anderson Report. INTERA identified an area upstream from the Eastern Area AUM Site that is identical to the AUM identified in the Anderson Report. This area upstream is referred to herein as the Western Area AUM Site. The Eastern Area AUM Site consists of one pile, one load out, one structure, one adit, and miscellaneous debris such as wooden beams, cables, eye bolts, and a 55-gallon drum. The Western Area AUM Site consists of two adits and one pile. A Photo Log is provided in Appendix A, Table 1 lists all of the AUM Site features, and Figures 4 and 5 show the locations of the AUM Site features (scales may differ, due to the resolution of the aerial photographs).

2.1 MINE SHAFTS, ADITS, AND DECLINES

One adit (Adit-1) was found at the Eastern Area AUM Site. Adit-1 was located at the top of a scree slope and entered the rock face approximately 1 foot. Two adits (Adit-2 and Adit-3) were found at the Western Area AUM Site. Adit-2 had a wooden door approximately 15 ft into the rock face. It is unknown how deep Adit-2 extends although the Anderson Report reported that Adit-2 extends approximately 30 ft into the rock face at which point it turns left for approximately 75 ft (Anderson, 1980). Adit-3 extended approximately 4 ft in to the rock face wall and contained wooden timbers and scrap metal. Adit-2 appeared to be similar to the lower adit described in the Anderson Report based on the photograph and the estimated depth and trend. The upper adit described in the Anderson report was not located; this adit potentially could be located farther up the slope although INTERA could not access this area safely.

2.2 MINING AND EXPLORATION PITS AND OPEN CUTS

No open cuts or mining pits were identified at the AUM Site.

2.3 WASTE AND ORE PILES AND DISTURBANCES

One large waste rock pile was found at the Eastern Area AUM Site (PilePly-1). The entire slope of the Eastern Area AUM Site contained scree which could be a result of mining activities. One waste rock pile was found at the Western Area AUM Site (PilePt-1). Waste rock from PilePt-1 spills down the northern side of the pile down to the dirt trail.

2.4 MINING RELATED BUILDINGS AND FOUNDATIONS

A stone wall (StrucLn-1) was found at the Eastern Area AUM Site, a collapsed opening was located in the eastern portion of StrucLn-1. A load out (LoadPly-1) was found at the Eastern Area AUM Site. LoadPly-1 consisted of a stone wall and multiple metal pipes sticking out from the ground.

2.5 OTHER MINE FEATURES

An eyebolt (Equip-1) was found in the rock face at the top of the scree slope in the Eastern Area AUM Site. Wooden beams and cables (MiscPt-2) were found on the scree slope in the Eastern Area AUM Site. A fabricated 55-gallon metal drum (Equip-2) was found in the Eastern Area AUM Site. Additional miscellaneous debris items were found throughout the Eastern Area AUM Site.

2.6 BOREHOLES

No boreholes were identified at the Eastern Area or Western Area AUM Site.

2.7 RECLAMATION ACTIVITIES

No reclamation activities were identified at the Eastern Area or Western Area AUM Site.

3.0 ARCHEOLOGICAL SITES

No apparent archeological sites were identified at or near the Eastern Area or Western Area AUM Site.

4.0 SITE GAMMA RADIATION READINGS

The background gamma radiation reading at the AUM Site was measured approximately 0.3 miles from the Western Area and 1.0 mile for the Eastern Area of the AUM Site. The background gamma readings were measured at 15 microroentgens per hour (µR/hr) at the ground surface and 15 µR/hr at 4 feet above the ground surface. The gamma radiation readings taken at the Eastern Area and Western Area AUM Site are provided in Table 2.

The gamma radiation readings at the Eastern Area AUM Site did not vary significantly above background levels (Table 2). The gamma radiation readings at the Western Area AUM Site were slightly greater than background. The maximum readings at the Western Area AUM Site were recorded at the entrance of Adit-2 and were measured at 45 µR/hr at the ground surface and 38 µR/hr at 4 feet above the ground surface.

5.0 CURRENT LAND USES

5.1 HUMAN ACTIVITY AND RECREATIONAL SITE USE

The Eastern Area and Western Area AUM Site are located off of a well maintained and well traveled Forest Service trail. INTERA encountered one person who was panning for gold in Mineral Creek. Evidence of past and present ranching exists in the surrounding area. This evidence includes residential houses, barns, fences, and corrals.

5.2 NEARBY RESIDENTIAL, COMMERCIAL AND INDUSTRIAL STRUCTURES

There are residential structures within a 1-mile radius of the Eastern Area and Western Area AUM Site. These structures are located on Access-1 which ends at the trailhead.

5.3 NEARBY DOMESTIC WELLS

A domestic well designated GSF-02234 is located within a 1-mile radius of the Eastern Area and Western Area AUM Site.

5.4 EVIDENCE OF GRAZING OR AGRICULTURE

Fences, corrals, and barns in the area attest to active and past ranching activity.

5.5 EVIDENCE OF WILDLIFE

Butterflies, lizards, crows, and deer tracks were observed in the surrounding areas of the Eastern Area and Western Area AUM Site.

6.0 VEGETATION

The AUM Site is located in the Coniferous and Mixed Woodland vegetation type and contains a mixture of arid and mesic vegetation (mesic vegetation needs a balanced supply of water). Woody species identified at the AUM site include Gambel Oak, Arizona Sycamore, Cottonwood, Smooth Sumac, and Pointleaf Manzanita. Threadleaf Snakeweed and cholla were also present at the AUM Site. Forbs collected at the AUM Site include Common Mullein, Horehound, and a Penstemon species. While there was no evidence of noxious weeds from collected samples or photographs of the AUM Site, the presence of both Common Mullein and Horehound suggest a disturbed site.

7.0 POTENTIAL OFFSITE IMPACTS

7.1 EROSION

Some gullying and downward movement of waste rock was observed at the Eastern Area and Western Area AUM Site.

7.2 ENVIRONMENTAL IMPACTS

There is no evidence of soil staining from chemicals potentially brought to the Eastern Area and Western Area AUM Site, or from constituents present in the ore or waste rock. Gamma radiation levels at the Eastern Area AUM Site are not significantly above background level. Gamma radiation levels at the Western Area AUM Site are slightly greater than background level.

8.0 REFERENCES

Anderson, Orin J., 1980. Abandoned or Inactive Uranium Mines in New Mexico. New Mexico Bureau of Mines and Mineral Resources Open File Report 148.

Daniel B. Stephens & Associates, Inc (DBSA), 2005. Southwest New Mexico Regional Water Plan. Prepared for: Southwest New Mexico Regional Water Plan Steering Committee, City of Deming, New Mexico.

McLemore, Virginia T., 1983. Uranium and Thorium Occurrences in New Mexico: Distribution, Geology, Production, and Resources with Selected Bibliography, New Mexico Bureau of Mines & Mineral Resources, Open-file Report 183, pp. 1-21.

Mining and Minerals Division (MMD), 2009. Mine Feature Data Dictionary.

New Mexico Office of the State Engineer (NMOSE), 2008. Wells and Surface Diversions in New Mexico. WATERS_PODS_may08.shapfile. OSE Waters Database.

TABLES

Table 1
Site Features

Baby-NM0112
Abandoned Uranium Mine Assessments

Feature Name	On Site?	Feature Type	Associated Feature	Material	Height or Depth (ft)	Width or Diameter (ft)	Length (ft)	Open	Collapsed	Closure Type	Associated Photo	Notes
Access-1	No	Dirt Maintained	--	--	--	--	--	--	--	--	--	Road from Alma to trailhead #201
Access-2	No	Dirt Maintained	--	--	--	--	--	--	--	--	--	Hand digitized, from trailhead to Access-1
Adit-1	Yes	--	--	--	4.00	5.00	1.00	No	No	Other	NM0112_001.jpg	Blast hole
Adit-2	Yes	--	pilept-1	--	6.00	5.00	0.00	Yes	No	None	NM0112_023.jpg NM0112_024.jpg NM0112_025.jpg	15 feet to the door
Adit-3	Yes	--	--	--	3.00	4.00	4.00	No	Unknown	Unknown	NM0112_027.jpg	Timber and scrap metal in adit
Equip-1	Yes	--	--	--	--	--	--	--	--	--	NM0112_004.jpg	Eyebolt attached to rock face
Equip-2	Yes	--	--	--	--	--	--	--	--	--	NM0112_011.jpg	Fabricated 55-gallon metal drum
LoadPly-1	Yes	stone structure	--	Stone	15.00	50.00	25.00	--	--	--	NM0112_007.jpg, NM0112_008.jpg	base of scree slope
MiscPt-1	No	--	--	--	--	--	--	--	--	--	--	Trailhead #201, Mineral Creek Trail
MiscPt-2	Yes	--	--	--	--	--	--	--	--		NM0112_002.jpg NM0112_003.jpg	wood beams and cables
PilePly-1	Yes	Waste	--	Rock	10.00	15.00	40.00	--	--	--	NM0112_006.jpg	--
PilePt-1	Yes	Waste	--	Rock	1.00	7.00	20.00	--	--	--	NM0112_024.jpg NM0112_025.jpg	Point taken 200 ft west of actual location
StrucLn-1	Yes	Wall	--	Stone	10.00	35.00	2.00	--	--	--	NM0112_009.jpg NM0112_010.jpg NM0112_012.jpg	GPS did not collect, Digitized based on approximate location of feature

Notes:

-- designates no information

By convention, adits have height, width, and length but not depth.

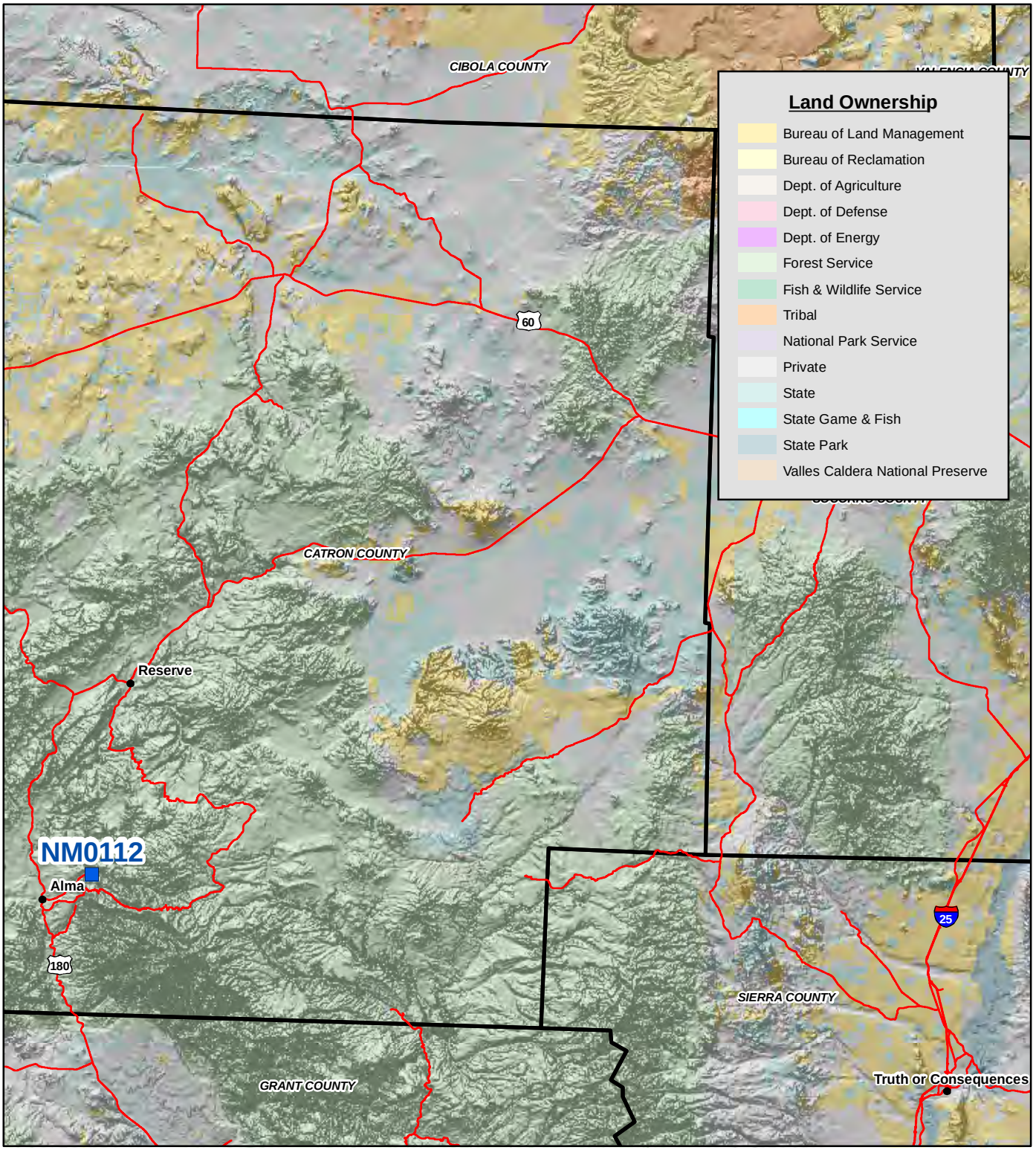
Table 2
Gamma Radiation Survey Results

Baby-NM0112
Abandoned Uranium Mine Assessments

Reading ID	Contact (µR/hr)	4 ft (µR/hr)	Associated Photo	Asssociated Feature
Rad-1	34	28	--	Adit-1
Rad-2	28	28	--	MiscPt-2
Rad-3	26	25	NM0112_006	PilePly-1
Rad-4	22	24	--	PilePly-1
Rad-5	26	26	--	LoadPly-1
Rad-6	22	23	--	LoadPly-1
Rad-7	27	25	--	StrucLn-1
Rad-8	20	20	NM0112_011	Equip-2
Rad-9	22	21	--	--
Rad-10	20	20	--	--
Rad-11	45	38	NM0112_023	Adit-2
Rad-12	40	32	--	PilePt-1
Rad-13	37	34	--	Adit-3
Rad-14	42	35	--	PilePt-1
Rad-15	38	34	--	PilePt-1
Rad-16	40	33	--	PilePt-1
Rad-17	38	34	--	PilePt-1
Rad-18	24	20	--	--
Rad-19	25	22	--	--
Rad-20	30	26	--	Adit-3
RadBack-1	15	15	--	MiscPt-1

Notes:
All gamma readings at this site taken by Ludlum 192 µR/Ratemeter
µR/hr=microroetgens per hour
-- designates no information

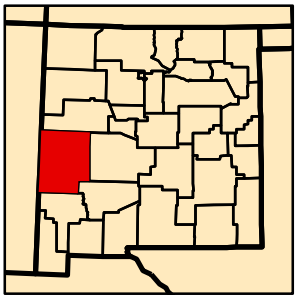
FIGURES



Map Source(s):
Ownership - BLM, 2007

0 7.5 15 30
Miles

NORTH



Legend

- AUM Location
- Road
- County Boundary

Figure 1
Site Location Map
NM0112-Baby
Abandoned Uranium Mine Assessment

File: S:\Projects\EMMD-001_Abandoned Uranium Mine Assessment\Sites\NM0112-Baby\GIS\Maps\Site_Map_Baby_CP.mxd 03/24/2010

Map Source(s):
U.S. Geological Survey 7.5-Minute
Topographic Map
-Mogollon, 1963

0 750 1,500 3,000
Feet

NORTH

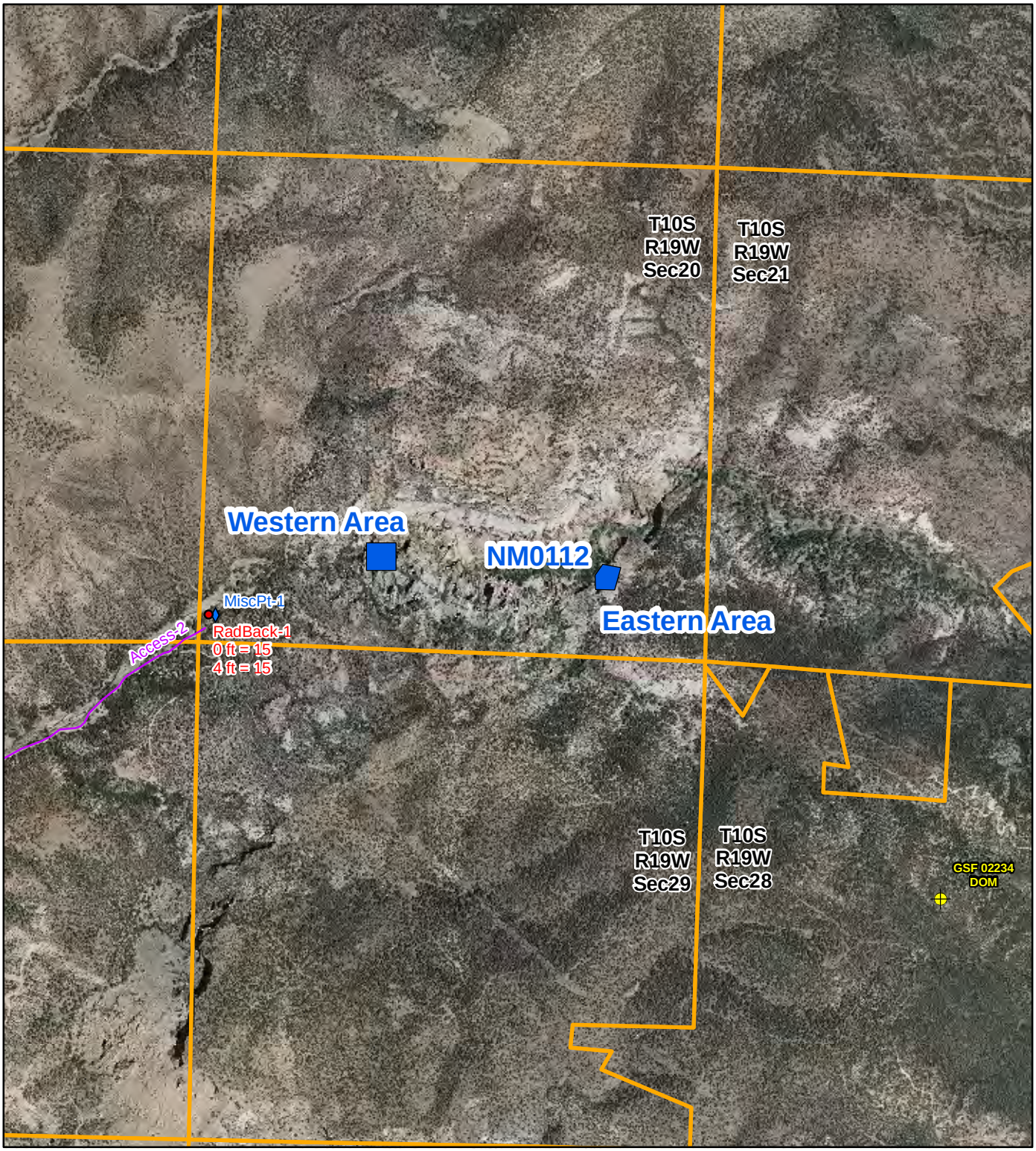
Legend

- Radiation Readings (µR/hr)
- Miscellaneous Feature
- Well Within 1 Mile of Site
- Access Route
- AUM Location Boundary

Figure 2
Topographic Map
NM0112-Baby
Abandoned Uranium
Mine Assessment

INTERA

File: S:\Projects\EMMD-001_Abandoned Uranium Mine Assessment\Sites\NM0112-Baby\GIS\Maps\Topo_Map_Baby_CP.mxd 03/17/2010



Map Source(s):
U.S. Geological Survey 7.5-Minute
DOQQ County Mosaic
-Catron County, 2009

0 750 1,500 3,000
Feet

NORTH

Legend

- Radiation Readings (µR/hr)
- Miscellaneous Feature
- Well Within 1 Mile of Site
- Access Route
- Section Boundary
- AUM Location Boundary

Figure 3
Aerial Photo
NM0112-Baby
Abandoned Uranium
Mine Assessment

INTERA

File: S:\Projects\EMMD-001_Abandoned Uranium Mine Assessment\Sites\NM0112-Baby\GIS\Maps\Aerial_Map_Baby_CP.mxd 03/17/2010

Legend

- Radiation Readings (µR/hr)
- Pile Location
- Adit
- Photo Location

0 40 80 160

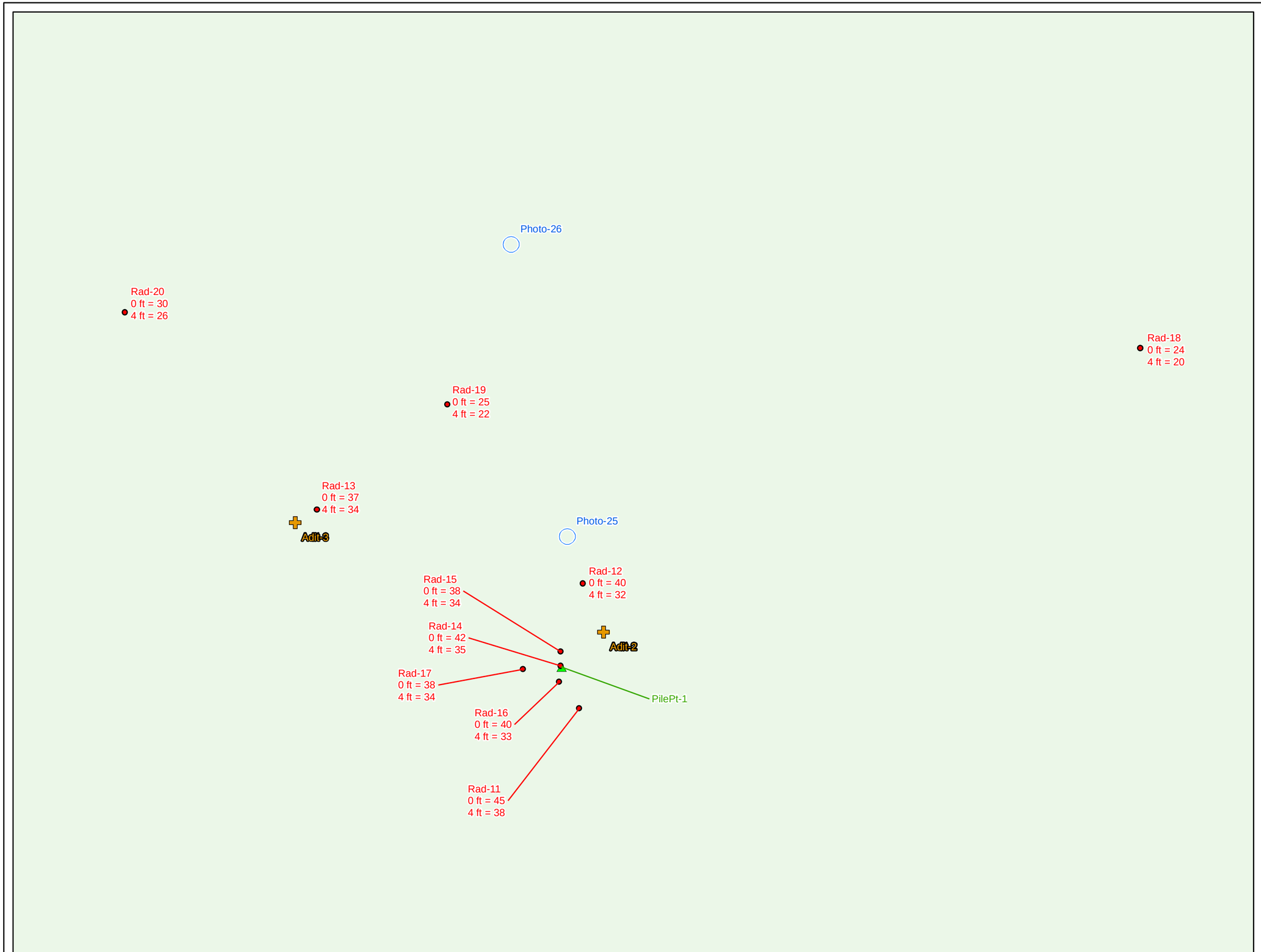
Feet

NORTH

Map Source(s):
U.S. Geological Survey 7.5-Minute
DOQQ County Mosaic
-Catron County, 2009

Figure 4a
Site Map on
Aerial Photo
Western Area
NM0112-Baby
Abandoned Uranium
Mine Assessment

File: S:\Projects\EMMD-001_Abandoned Uranium Mine Assessment\Sites\NM0112-Baby\GIS\Maps\Close_Up_Map_Aerial_BabyWesternCP.mxd 04/08/2010



Legend

- Radiation Readings (µR/hr)
- Pile Location
- Adit
- Photo Location

Surface Ownership

- Forest Service

0 5 10 20

Feet

NORTH

Map Source(s):
Ownership - BLM, 2008

Figure 4b
Site Map with
Surface Ownership
Western Area
NM0112-Baby
Abandoned Uranium
Mine Assessment

File: S:\Projects\EMMD-001_Abandoned Uranium Mine Assessment\Sites\NM0112-Baby\GIS\Maps\Close_Up_Map_Ownership_BabyWesternCP.mxd 04/08/2010

Legend

- Radiation Readings (µR/hr)
- Equipment Location
- Adit
- Miscellaneous Feature
- Photo Location
- Structure
- Load Out Boundary
- Pile Boundary

0 40 80 160

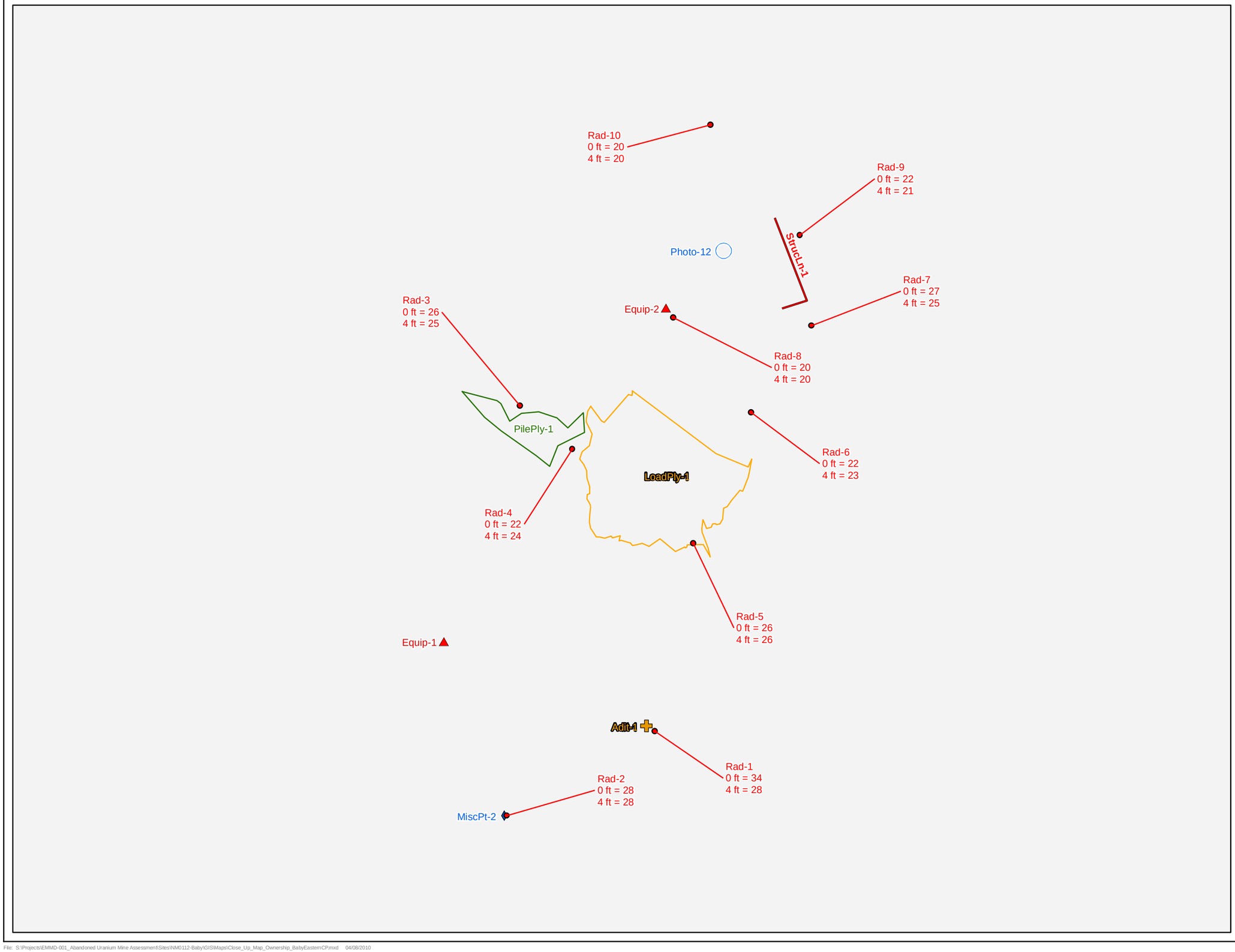
Feet

NORTH

Map Source(s):
U.S. Geological Survey 7.5-Minute
DOQQ County Mosaic
-Catron County, 2009

Figure 5a
Site Map on
Aerial Photo
Eastern Area
NM0112-Baby
Abandoned Uranium
Mine Assessment

File: S:\Projects\EMMD-001_Abandoned Uranium Mine Assessment\Sites\NM0112-Baby\GIS\Maps\Close_Up_Map_Aerial_BabyEasternCP.mxd 04/08/2010



Legend

- Radiation Readings (µR/hr)
- Equipment Location
- Adit
- Miscellaneous Feature
- Photo Location
- Structure
- Load Out Boundary
- Pile Boundary

Surface Ownership

- Private

0 20 40 80

Feet

NORTH

Map Source(s):
Ownership - BLM, 2008

Figure 5b
Site Map with Surface Ownership
Eastern Area
NM0112-Baby
Abandoned Uranium Mine Assessment

File: S:\Projects\EMMD-001_Abandoned Uranium Mine Assessment\Sites\NM0112-Baby\GIS\Maps\Close_Up_Map_Ownership_BabyEasternCP.mxd 04/08/2010

APPENDIX A

PHOTO LOG

Note: Gaps in the numbering sequence of the photos is the result of removing photos not suitable for the report. A full set of photos is provided in the electronic deliverable.

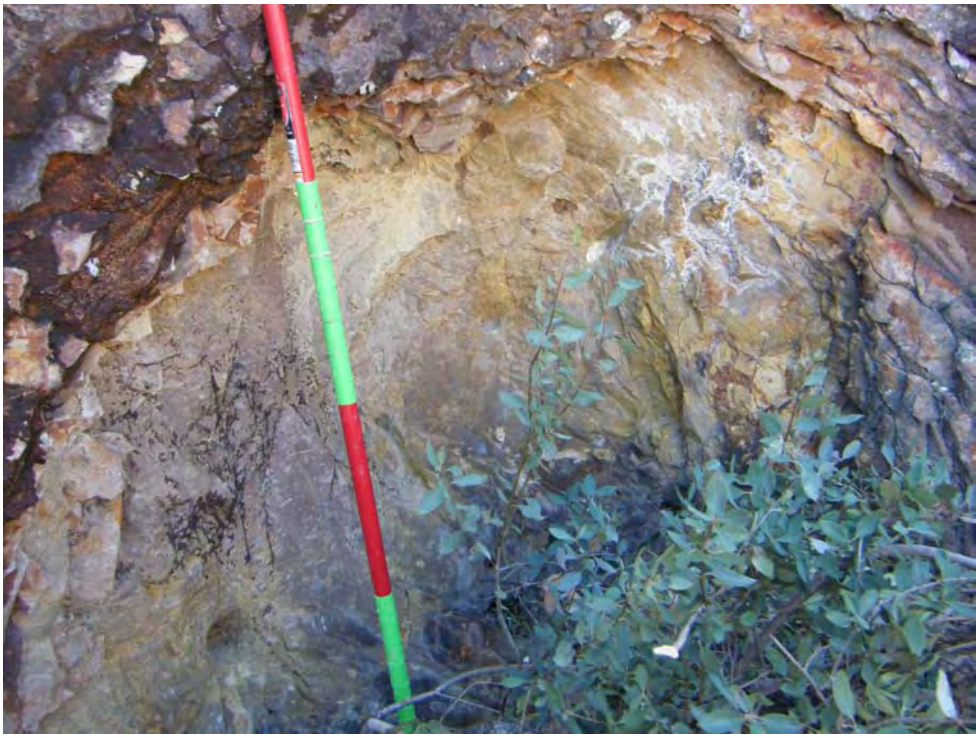


Photo 1-Looking south at Adit-1 located at the top of the scree slope in the Eastern Area.

Photo 2-Looking west at the rock face (MiscPt-2) at the top of the scree slope in the Eastern Area.

Photo 3-Looking north, down slope at wooden beams and cables in the Eastern Area.

Photo 4-Looking west at an eyebolt (Equip-1) attached to the rock face in the Eastern Area.

Photo 5-Looking north at wooden structure located at the top of the rock face above the Eastern Area.

Photo 6-Looking northeast at a waste pile (PilePly-1) located in the Eastern Area.

Photo 7-Looking south at LoadPly-1 located in the Eastern Area.

Photo 8-Looking west at LoadPly-1 located in the Eastern Area.

Photo 9-Looking east at StrucLn-1 located in the Eastern Area.

Photo 10-Looking at a collapsed hole in StrucLn-1 in the Eastern Area.

Photo 11-Looking at an altered 55-gallon metal drum (Equip-2) located in the Eastern Area.

Photo 12-Looking southeast at StrucLn-1 with the Site name in the Eastern Area.

Photo 15-Vegetation at the AUM Site.

Photo 18-Vegetation at the AUM Site.

Photo 19-Vegetation at the AUM Site.

Photo 20-Vegetation at the AUM Site.

Photo 21-Vegetation at the AUM Site.

Photo 23-Looking south at Adit-2 in the Western Area. Photo is similar to photo in Anderson Report.

Photo 24-Looking southeast at the waste pile (PilePt-1) adjacent to the entrance of Adit-2 in the Western Area.

Photo 25-Looking southeast at PilePt-1 and Adit-2 with the Site name in the Western Area.

Photo 26-Looking southeast, up towards the potential adit referenced in the Anderson Report in the Western Area.

Photo 27-Looking south at Adit-3 in the Western Area.

APPENDIX B

FIELD NOTES

Site Name: NM0112, Baby

Objective: Site Assessment

Personnel: Annelia Tinklenberg
Eileen Romesser

Equipment: Rental truck, Trimbel GeoXM (SN: 4948442271, 2008 series); Ludlum 192 (SN: 234149); Fuji Film digital camera (No. 80839493); backup Garmin GPS; cell phone amplifier; field laptop

1000 ~~0930~~ ALT At Trailhead for mineral Creek, at the end of Forest Road 701, Mineral Creek Road

Background Rad - at truck; 0m - 15 mR/h; 1m - 15 mR/h

Miscpt 1 - Trailhead 201, Mineral Creek Trail

1230 Found site, had to cross Mineral Creek numerous times.

1300 Adit 1 - beginning of an adit, 1' deep, 4' tall, 5' wide top of scree slope, blast holes
Photo 1 - Adit 1, looking south
Rad 1 - Adit 1; 0m - 34 mR/h; 1m - 28 mR/h

Miscpt 2 - wood and cables along scree slope, may be location of adit (could be buried)

Rad 2 - miscpt 2; 0m - 28 mR/h; 1m - 28 mR/h

Photo 2 - Miscpt 2, looking west at rock face

Photo 3 - miscpt 2, looking north down slope, wood and cables

Equip 1 - large eyebolt drilled in wall.

Photo 4 - Equip 1 - looking ~~west~~ ALT west

Photo 5 - wooden structure at top of ~~hr~~ ALT rock face

Pileply 1 - 10' tall; 15' wide; 40' long; pieces of scrap metal
Rad 3 - Pileply 1 - 0m - 26 mR/h; 1m - 25 mR/h
Photo 6 - looking north east at pileply 1

Rad 4 - Pileply 1 - 0m - 22 mR/h; 1m - 24 mR/h

Loadout Ply 1 - load out structure; 15' high, 50' wide, 25' long
Photo 7 - looking South at Loadout Ply 1
~~Pht~~ ALT
Photo 8 - looking west at Loadout Ply 1
Rad 5 - Loadout Ply 1 - 0m - 26 mR/h; 1m - 26 mR/h

Rad 6 - 0m - 22 mR/h; 1m - 23 mR/h

Wall 1 - 10' high; 35' long; 2' wide - Satellite reception poor
Photo 9 - looking east at wall 1

Photo 10 - hole in wall, collapsed; 3' wide, 3' deep, 4-6' tall

Rad 7 - hole in wall-1; 0m - 27μR/h; 1m - 25μR/h

Equip 2 - 55 gallon metal drum with spout
Photo 11 - Equip 2, looking northwest
Rad 8 - Equip 2 - 0m - 20μR/h; 20μR/h

Rad 9 - 0m - 22μR/h; 1m - 21μR/h

Rad 10 - 0m - 20μR/h; 1m - 20μR/h

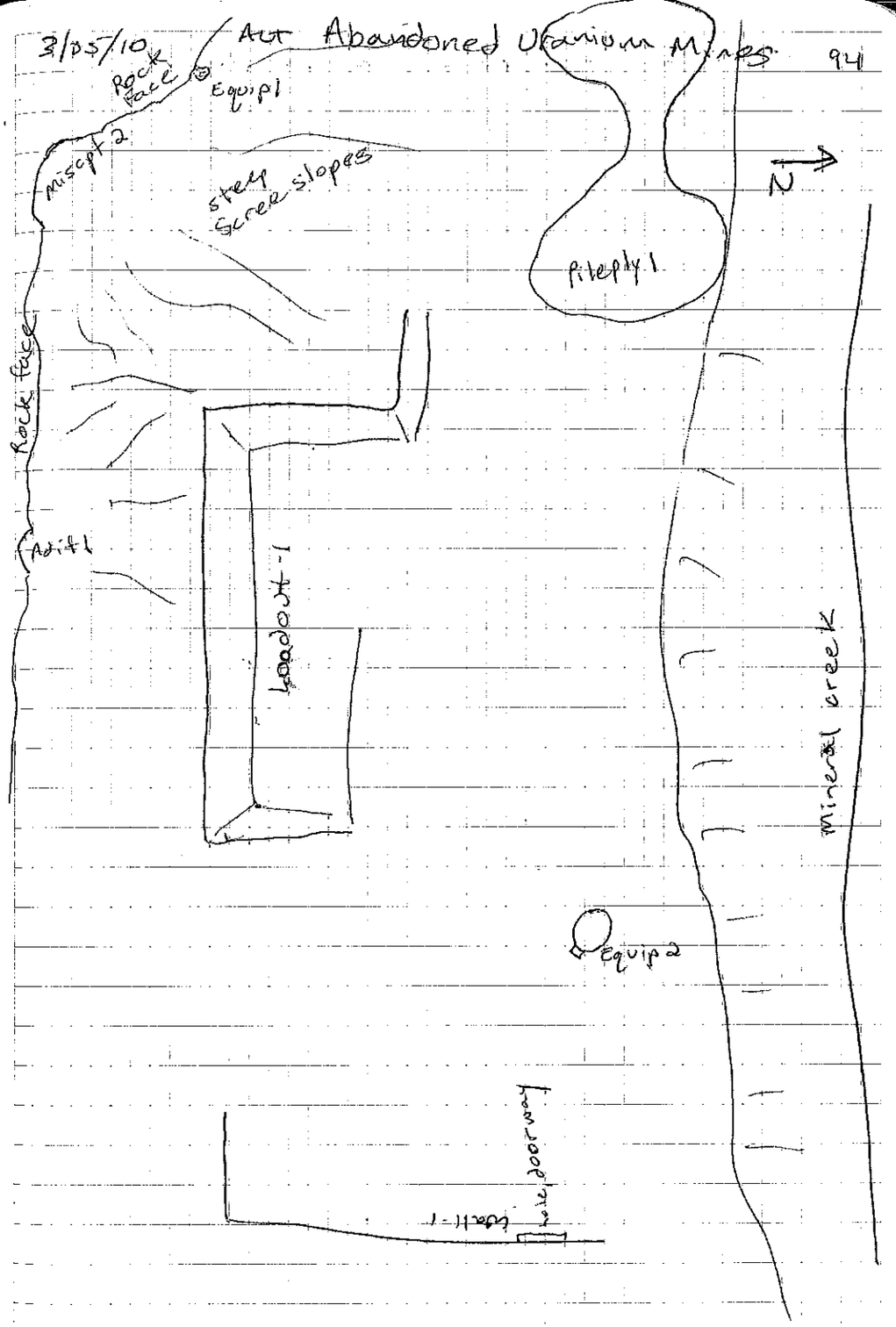
Photo 12 - Site name, looking south

Photos 13 - 22 - Vegetation

Soils: Minimal. Very thin, rocky. Tan, pinkish, localized black soils in riparian areas.
Rocks: Volcanic ash and tuff. Pink and tan andesite with veins of hydrothermal mineralization. Quartz and calcite crystals.

Human Activities: Recreational use; hikers and horse-back riders.

Wildlife: Black butterfly with yellow wing tips, lizard, crows, deer tracks.
Riparian vegetation; cottonwood, maple, oak, juniper, pine, willow, pussy willows, sumac, beech, cholla, prickley pear, wooly mullein, grasses, forbs.



1515 - Found site described in Anderson Report. Adit has door on it about 15 feet. Adit-2 is about 6' tall, 5' wide. Anderson describes it as extending another 25-35' and then turning to the left and extending another 75'. Adit on south wall of canyon and trending south.

Adit-2 - Baby Site. 6' tall, 5' wide, 15' to door
Photo 23 - Adit 2, looking south
Rad 11 - Adit 2 entrance; 0m - 45 uR/h; 1m - 38 uR/h

Pile Pt-1 - west of Adit. 7' wide, 1' tall; 20' long
Rad 12 - Pile Pt-1; 0m - ~~40~~ 40 uR/h; 1m - 32 uR/h
Photo 24 - Pile Pt-1 looking south

Photo 25 - site name, looking south at pile and Adit-2

1600
The second adit can be seen up a steep slope. We tried to access it but the slope gets to steep to be safe.
Photo 26 - looking up at second adit, southeast

Note: All GPS points taken from up the hill, in a steep canyon were we can't get satellites. All points taken near Photo 26 location.

Adit 3 - 3' tall, 4' wide, 4' deep; 2 pieces of timber and scrap metal in the Adit
Photo 27 - looking south at Adit 3
Rad 13 - Adit 3; 0m - 37 uR/h; 1m - 34 uR/h

3/05/10 Abandoned Uranium Mines

1605 - Went back to Adit 2 to take more Rad readings - did not GPS because we could not get satellite reception.

Rad 14 - top of pile pt-1, near Adit-2
0m - 42 uR/h; 1m - 35 uR/h

Rad 15 - middle of pile pt-1; 0m - 38 uR/h; 1m - 34 uR/h

Rad 16 - base of pile pt-1, below adit-2
0m - 40 uR/h; 1m - 33 uR/h

Rad 17 - base of pile pt-1; 0m - 38 uR/h; 1m - 34 uR/h

Rad 18 - between Adit 2 and Adit 3
0m - 24 uR/h; 1m - 20 uR/h

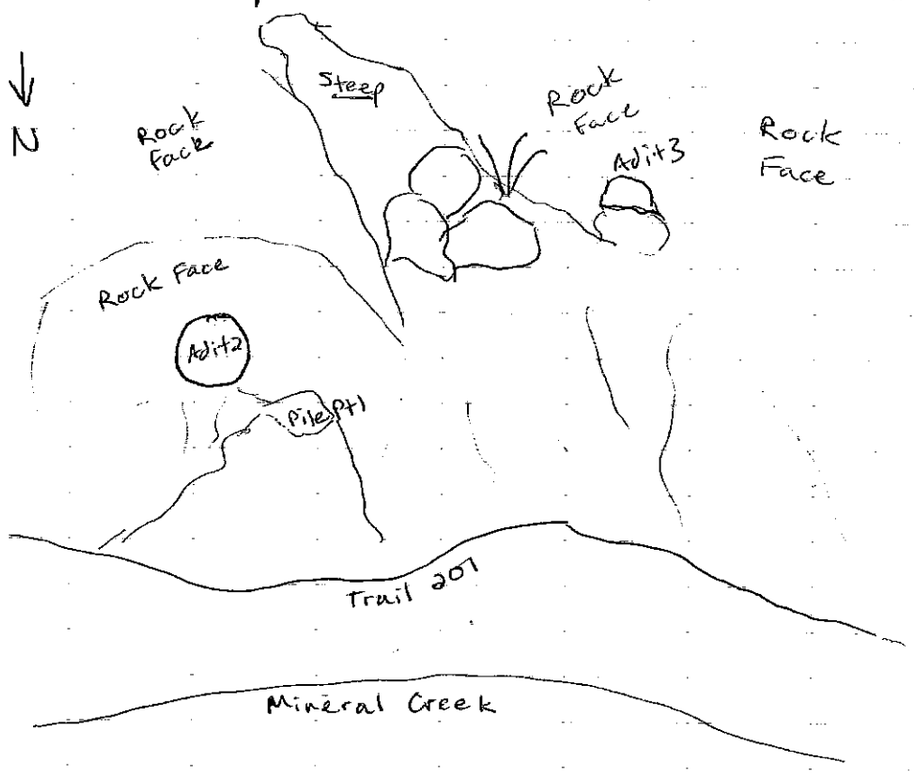
Rad 19 - loose rock near river; 0m - 25 uR/h; 1m - 22 uR/h

Rad 20 - loose rock below Adit 3, may just be scree
0m - 30 uR/h; 1m - 26 uR/h

1635 - packing up to leave site, not GPS-ing trail access due to a lack of satellite reception and a number of creek crossings.

1700 - Back at truck.
Access Rd-1, from trailhead 201 to Alma along Forest Road 701.
1710 - In Alma, to drive back to Albuquerque

97 3/05/10 ALT Abandoned Uranium Mines and Adit in Anderson Report



Soils, Rocks, Human Activity, Wildlife: same as on page 93.